IOWA STATE UNIVERSITY
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Volume 9 | Issue 1 Article 18

1946

The Iowa Veterinary Diagnostic Laboratory

cluding gunshot wounds, empyema, and osteomyelitis when Gramicidin S, a less refined product, was used.

A 2 year survey showed acute otitis media, acute and chronic sinusitis to yield better to tyrothricin than to any other treatment. It has also been effective against mixed infections of the vagina.

When applied to a gauze bandage where it can become moistened the tyrothricin readily goes into solution in the tissue fluids in practically optimal concentrations. The bactericidal action of tyrothricin is not affected by autoclaving hence such packs can be sterilized after the application of the tyrothricin.

Tyrothricin possesses a low tissue toxicity but it does have a hemolytic action when administered parenterally. Studies, as yet, have been unable to demonstrate any developing sensitivity of body tissues to tyrothricin.

[*John Henderson:The Status of Tyrothricin as an Antibiotic Agent for Topical Application. J. Am. Pharm. Assn., 35:5, (May, 1946):141–147*].

The Bureau of Animal Industry conducted studies on the relative tenderness of different cuts of beef. The carcasses tested were 8 cows 4 to 12 years old, 3 heifers 3-years old, 21 steers 15 to 18 months old and 1 calf. In all cases the tenderloin was the most tender cut, followed by the rib, short loin, loin end, chuck cuts, round, neck and foreshank in decreasing order of tenderness. The steer meat was more tender than the meat from the cows. Histological study showed that increasing diameter of muscle fiber was associated with decreasing tenderness.

According to reports received from the Bureau of Animal Industry skim milk or whey when fed once daily, instead of grain, or fed exclusively for 3 consecutive days at intervals of 2 weeks, offers effective protection for pigs against the acquisition of large roundworms, nodular worms and whipworms. The pigs so fed made satisfactory gains and remained in good condition.

The Iowa Veterinary Diagnostic Laboratory

For the past 18 years, laboratory diagnostic service to the livestock industry of Iowa has been provided by the Division of Veterinary Medicine, Iowa State College, through its Department of Veterinary Pathology. The laboratory has been housed in the Veterinary Pathology Building which also houses the Department of Veterinary Hygiene. The crowded conditions have interfered with the most effective operation of the laboratory and there seemed to be no possibility of expanding the present facilities. A careful study of building facilities within the Veterinary Division indicated that the only way to meet the increased statewide demand for laboratory service for animal disease control is through provision of a new modern building.

Through a joint arrangement with the Division of Animal Industry, Iowa Department of Agriculture, the diagnostic laboratory was reorganized and established within the Veterinary Division as the Iowa Veterinary Diagnostic Laboratory as of July 1, 1946. Plans are in preparation for a new building, which will be constructed at the earliest possible time. The site for the new laboratory building will very likely be where the old military barracks building is now located.

The present staff of the diagnostic laboratory consists of Dr. E. A. Benbrook, supervisor, Drs. Sam G. Kenzy and Leon Zlotnick, diagnosticians, with Donald T. Mason and Jean Persson, technicians.

Furacin, a yellow powder derived from the hulls of oats, is a new chemical which has been discovered for the treatment of skin infections. It not only checks the growth of organisms but actually kills them.

Pyridoxine, vitamin B_6, is reported by Cantor and Scott of the University of Alberta to be effective in the treatment of sulfathiazole, aspirin and thiouracil poisoning.